

## **ABSTRACT**

This invention relates to a degraded, inhibited cationic starch for use in papermaking systems, which affords improved physical properties, particularly strength. Additionally these derivatives provide easy-to-prepare alternatives to traditional starches, and can even be added directly to the papermaking process without cooking. While the benefits of these starch compositions can be applied to any type of papermaking method, they are especially useful in high shear, high conductivity and recycle systems.